DOCUMENT RESUME

ED 426 528 EC 306 961

| | |
|---|---|
| TITLE | Family Participation. Chapter 3. |
| PUB DATE | 1996-00-00 |
| NOTE | 46p.; In: A System of Care of Children's Mental Health: Expanding the Research Base. Proceedings of the Annual Research Conference (8th, Tampa, FL, 1996); see EC 306 958. |
| AVAILABLE FROM | Web site: http://lumpy.fmhi.usf.edu/CFSroot/rtc/proceeding8th |
| PUB TYPE | Reports - Descriptive (141) -- Speeches/Meeting Papers (150) |
| EDRS PRICE | MF01/PC02 Plus Postage. |
| DESCRIPTORS | Adolescents; *Behavior Disorders; Children; Community Programs; *Emotional Disturbances; *Family Involvement; Mental Disorders; *Mental Health; *Parent Participation; Participant Satisfaction; Questionnaires; Rating Scales; Respite Care |

ABSTRACT

This collection of papers presented at a 1996 conference on children's mental health research focuses on studies of family participation. Individual papers have the following titles and authors: (1) "Measuring Satisfaction with Community-Based Services for Children with Severe Emotional Disturbances: A Comparison of Questionnaires for Children and Parents" (Lawrence W. Rouse and others); (2) "Use of Consumer Satisfaction Information To Promote Change in Child/Adolescent Mental Health Settings" (Maryann Davis and others); (3) "Parent Satisfaction with Mental Health Staff Interactions: The Development, Validity, and Reliability of the Parent Satisfaction Scale and the Parent-Staff Interaction Scale" (Janis Gerkensmeyer and others); (4) "Measuring Perceptions of Family Involvement in Service Provision for Youth with Serious Emotional Disturbance" (W. John Curtis and others); (5) "Families' Perception of the Effects of Respite" (Sandra E. Herman); (6) "Parent-Professional Collaboration: A Pilot Study of Parents as Researchers" (Gail B. Werrbach and Laura Perry); (7) "The Significance of V61.xx-Family Problems in Mental Health Care for Children" (Theodore Fallon, Jr.); and (8) "The Influence of Family Functioning on the Incidence of Conduct Disorder among Children and Adolescents" (Laura V. Scaramella). (Individual papers contain references.) (DB)

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# 8th Annual Children's Mental Health Research Conference Proceedings. Chapter 3. Family Participation.

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8th Annual Research & Training Center Conference Proceedings, Dept of Child and Family Studies, Florida Mental Health Institute, University of South Florida,1996

# Measuring Satisfaction with Community-Based Services for Children with Severe Emotional Disturbances: A Comparison of Questionnaires for Children and Parents

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## Introduction

The purpose of the present study was to investigate the psychometric characteristics of the Child and Adolescent Satisfaction Questionnaire (CASQ) and the Family Satisfaction Questionnaire (FSQ) used in the evaluation component of the Texas Children's Mental Health Plan (TCMHP). The TCMHP is an interagency public mental health initiative to provide community-based services to children and adolescents with severe emotional and behavioral problems. The current study also sought to explore the nature of children's satisfaction with mental health services.

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## Method

Instrument Development

The FSQ and CASQ were developed by a team of evaluation personnel representing the nine agencies participating in the TCMHP. Items considered for inclusion in the measure were required to capture consumer perceptions of mental health services that are important to both the consumer and the goals of the TCMHP. The fourteen items that were ultimately chosen to appear on both questionnaires are related to general satisfaction with services, consumer relationship with the service provider, consumer participation, things learned in treatment, and general child and family functioning after services. Twelve items are in the form of a 5-point likert scale, one item is a checklist of barriers, and one item provides the opportunity for written comments. Only the twelve likert scale items are scored, yielding a total score of 12 - 60.

Subjects

Consumers who were eligible to participate in the study included children with severe emotional disturbance and their families who completed TCMHP services between September 1992 and January 1994. Three hundred and fifty four parent questionnaires and 266 child questionnaires were returned. The characteristics of the children who returned the questionnaires were very similar to the total population of children served by TCMHP programs. Ninety-seven percent were between six and 18 years old. Sixty five percent were male and 36% were female. Fifty-eight percent were White, 23% were Black, 18% were Hispanic, and 2% were from other ethnic backgrounds.

Procedure

Upon completion of services, parents and children were given a copy of FSQ and CASQ and two postage paid envelopes. They were instructed to complete the questionnaires independently and return them to the research office through the mail.

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## Results and Implications

The mean FSQ score was 51 and the mean CASQ score was 50. There were no significant differences in mean satisfaction scores for variables such as ethnicity and service type for either measure. However, children and parents were more satisfied with services if the child was rated as completing services as compared to children who did not complete service. Cronbach's alpha, a measure of internal consistency, was .89 for the FSQ and .88 for the CASQ. Most items showed a moderate to high correlation with the total score for both measures.

A principal component factor analysis was performed to determine construct validity. Three factors were retained for both the FSQ and CASQ after a Promax oblique rotation was performed. Factor one, for both measures, was labeled "Treatment Effectiveness" representing high loadings for items related to treatment outcomes for the child and family, progress made in treatment, and things learned in treatment. Factor two, for both measures, was labeled "General Satisfaction" representing high loadings for items related to service provider characteristics, happiness with service, and willingness to return for services. The third factor for the FSQ was labeled "Family Participation" representing the very high loading of the family participation item. The third factor for the CASQ, labeled "Child and Provider Relationship", represented loadings of the items related to staff niceness, staff helpfulness and child participation.

The FSQ and CASQ were correlated with other measures to determine concurrent validity. The correlation between the FSQ and CASQ was moderately high. The correlation between the FSQ and ratings of the service provider's satisfaction with the case was moderate while correlations with DSM-III-R GAF scores and ratings of treatment goals met were low. The correlations between the CASQ and the same measures were also low.

The results of the study showed the FSQ and CASQ may be useful in the evaluation and monitoring of community-based mental health services. Both measures are internally consistent and seem to measure treatment effectiveness and general satisfaction with services as intended. The results also showed that children's perception of treatment outcome may be associated with the child-therapist relationship while the parent's perception of treatment outcome may be associated with general satisfaction with services. These results, taken together with the correlation of the FSQ with the service provider's satisfaction with the case, may indicate a very different experience between adults who seek and deliver services and the children who are the focus of mental health interventions.

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Lawrence W. Rouse, Ph.D.
Nancy MacCabe, Ph.D.
Marcia G. Toprac, Ph.D.
Research and Special Projects
Texas Department of Mental Health and Mental Retardation
P.O. Box 12668
Austin, TX 78711-2668
512/206-4817

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# Use of Consumer Satisfaction Information to Promote Change in Child/Adolescent Mental Health Settings

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**Introduction**

The literature on assessment of satisfaction with child and adolescent mental health services is replete with instruments to assess adolescents' and parents' satisfaction, and the beginnings of a research base on factors that influence satisfaction is developing (reviewed in Young, Nicholson & Davis, 1995). While child and adolescent mental health agencies and research projects are strongly encouraged to gather information about consumer satisfaction, there is little guidance available in the literature on how to best use this information. For example, should a certain percentage of negative responses be used as a red flag to indicate that a program has a problem, or should all negative feedback be addressed? Additionally once it is determined that there is significant dissatisfaction, how should it be addressed? Should this be a standard part of the quality improvement process, should it lead to a focused assessment, or is there some other process by which the information can be used?

The current study attempted to determine: (1) how consumer satisfaction information is most commonly obtained, (2) the purposes for gathering consumer satisfaction feedback, (3) the process for making the information useful, and (4) whether one of the barriers to utilization of consumer satisfaction feedback is the dismissal of its importance by professionals.

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**Methods**

Subjects

Surveys, described below, were included in the packets of all attendees (approximately 500) of the 7th Annual Research Conference - A System of Care for Children's Mental Health: Expanding the Research Base, February 28 - March 2, 1994. This conference's participants include some of the preeminent researchers of children's mental health services, as well as service providers, administrators and consumers. Because of the low response rate, the survey was mailed to all attendees on the participant list (N=378). The total number of responses was 78.

Instrument

A written survey was developed that included a total of 9 questions, one of which contained several parts. Questions were open-ended (i.e., who provides satisfaction information?, why has consumer satisfaction been assessed?). Questions addressed characteristics of the respondent, methods used to assess satisfaction, the purpose of gathering satisfaction information and how the information had been used.

Coding

Because of the open-ended nature of the questions, answers were classified by creating categories using half of surveys, then these categories were applied to the other half of the surveys. The half on which categories were created was then coded again using the final categories to minimize drift.

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**Results**

Of the 78 respondents, 83% reported that they or their organization had assessed consumer satisfaction. The largest group of respondents were those from state or local agencies (36%), followed by direct providers (23%), respondents affiliated with universities, and respondents from some other setting (19%). Thirty-six percent of respondents had developed their assessment instrument, 31% had helped collect the data, 21% had been involved in the data analysis, 18% assisted in writing up the results, 8% participated in designing the methodology, and only 12% had no direct involvement in the assessment process.

Assessment Methods

Respondents described a variety of methods for gathering satisfaction information; however, written surveys administered to both parents and children/adolescents during or after treatment was the most common method (see Table 1) Seventy-seven percent of respondents indicated that the identity of survey informants was consistently protected.

*Why has satisfaction been assessed/How has it been used?*

Respondents treated these two questions as the same question, indicating that the survey's intended use was the purpose for which it was gathered. Satisfaction information had been used for a variety of purposes, the most common of which was to guide program change, but also for guiding policy change, justification to funders, and adding to the literature on assessment of satisfaction.

*How has satisfaction feedback lead to changes?*

This question was intended to address the process by which the information lead to change. In retrospect, the question was too vaguely worded, and resulted in a reiteration of the changes that had been made rather than the process. However from the answers, it was clear that for 55% of respondents satisfaction feedback had been used to produce some specific change. Seventeen (22%) reported that the information had not been used, and another 22% described the process. In some cases, this process consisted of reporting the negative responses to boards or other groups that then decided upon action. In other cases, program directors personally contacted the respondents to address concerns not given anonymously.

*What are the advantages or disadvantages of collecting or using satisfaction information?*

The vast majority (81%) reported advantages of having consumer satisfaction information, the majority of which concerned matching program and policy practices with parent and consumer needs. Thirty-four percent cited disadvantages that included the labor intensity, cost of gathering the information, and the tendency of consumers/parents to rate services overly highly.

*Observed negative feedback being dismissed?*

Many respondents (46%) responded that they had never seen consumer feedback being dismissed, and several respondents expressed that negative feedback was the most useful kind of feedback. However, 36% reported that they had seen information dismissed. Some respondents specifically stated that parents were perceived to be part of the child's 'problem,' and their opinions were invalidated because of this. Finally, others described professionals that simply felt that it was not valid information&shyp;usually for methodological reasons.

Group Differences

Comparisons were made between the responses of those who were university, direct service, local/state agency, or other based. The only methodological difference was in the time at which satisfaction was assessed, with university-based respondents reporting more baseline assessment (57% versus 26% for direct service providers, 11% for state/local agencies and 9% for other based respondents). As one might imagine, the purposes for gathering satisfaction differed between groups, with university based respondents the only ones assessing satisfaction for research purposes (23%), while agency-based individuals were more interested in knowing the level of satisfaction with their programs (15%, versus 8% of university-based, 0% direct services, and 4% of other-based). How feedback was used also varied between groups. Ninety percent of those who were based in 'other' settings used the information to change programs (many of these were advocacy based settings). In comparison, this use was reported by 63% of direct service providers, 33% of state/local agencies and only 21% of university-based respondents. Interestingly, 20% of direct service providers used the information for policy change, as did

7% of university based respondents, while none of the state/local agency or other-based respondents reported this use.

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**Conclusions**

In general, respondents were knowledgeable about procedures for assessing consumer satisfaction in the area of children's mental health. This should be considered a bias in the sample, and may not represent wide usage of consumer satisfaction assessment within children's service programs. While there was great variation in how satisfaction data was collected, there was a clear preference for written surveys assessed anonymously during and after treatment. It is encouraging that satisfaction was frequently, and equally, assessed for both parents and children/adolescents.

The purpose and use of having consumer satisfaction feedback was varied and interesting. The primary purpose was reported to be to inform and improve services. Although the details of these service changes were not often presented, many respondents did report some changes being made in response to satisfaction data. At the same time, dismissal of negative consumer feedback was not uncommon. There were also clear differences in the reasons for collecting this type of data across the different service settings of the respondents. Lastly, the survey was not adequately constructed to assess the process by which satisfaction information leads to change.

In our review of the consumer satisfaction literature (Young, et al., 1995), we found that procedures for utilizing consumer satisfaction feedback for programmatic or policy change were not addressed. With the current ubiquitous demand to obtain consumer satisfaction information, and the desire of policy makers, administrators and providers to know what is satisfying and dissatisfying about their services, it is important that concrete procedures to respond to consumer feedback be described and discussed in the future.

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Maryann Davis, Ph.D.*
*Director of Research*
Charles River Health Management, Inc.
77 Warren Street,
Brighton, MA 02135

Stephen Young, M.A.,
*Research Assistant*
Department of Psychiatry
University of Massachusetts Medical School
55 Lake Ave. North
Worcester, MA 01655
508/793-1550, Fax: 508/754-5007
and Graduate Student
Department of Psychology
Clark University
Worcester, MA.

Joanne Nicholson, Ph.D.
*Assistant Professor*
Department of Psychiatry
University of Massachusetts Medical School
55 Lake Ave. North
Worcester, MA 01655
508/793-1550 Fax: 508/754-5007

*Since the time of submission, the first author has relocated. Address correspondence to: Maryann Davis, Ph.D.. Assistant Professor, Department of Psychiatry, University of Massachusetts Medical

School, 55 Lake Ave. North, Worcester, MA 01655, phone (508) 793-1550, fax (508)754-5007, e-mail: MaryAnn.Davis@BANGATE.UMMED.EDU

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Table 1

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Table 1
Use of Consumer Satisfaction Assessment

| *When is satisfaction assessed?* | % |
|---|---|
| Before | 21.8 |
| During | 46.2 |
| At closing | 12.8 |
| Following closing | 47.4 |
| Periodically | 16.7 |
| Other | 2.6 |
| *Who's satisfaction is assessed?* | % |
| Child/adolescent | 57.7 |
| Parent | 64.1 |
| Collateral | 17.9 |
| Staff | 6.4 |
| *Method of surveys* | % |
| Written survey | 70.5 |
| Face-to-face interview | 29.5 |
| Phone interview | 17.9 |
| Focus groups | 6.4 |
| Other | 5.1 |
| *How has satisfaction information been used?* | % |
| Program change | 41.0 |
| Program feedback | 20.5 |
| Develop new program | 10.3 |
| Individual feedback | 10.3 |
| System feedback | 7.7 |
| Add to literature | 7.7 |
| Substantiate funding | 5.1 |
| Change policy | 5.1 |
| Hasn't yet/will be | 3.8 |
| Given to advocates | 2.6 |
| Unused | 2.6 |
| Other | 5.1 |

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# Parent Satisfaction with Mental Health Staff Interactions: The Development,Validity, and Reliability of the Parent Satisfaction Scale and the Parent-Staff Interaction Scale

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## Purpose

It has been conservatively estimated that 12% or 7.5 million of the nation's children suffer from mental health problems (National Institute of Medicine, 1989; U.S. Department of Health and Human Services, 1990). Approximately 2 million of these children have received treatment, and about half of those receiving treatment have been getting inappropriate treatment (Saxe, Cross & Silverman, 1988). Services for these children have been described as fragmented, duplicated, and too restrictive (Knitzer, 1982; Young, 1990). Services have also been criticized for not being community based, for being driven by the needs of the providers or payers rather than the needs of the children and their families, and for failing to include parents as part of the treatment team.

The need exists to assure that appropriate treatment is available to children with mental health problems and to their families. An important part of this assurance is obtaining parent satisfaction information. Parent satisfaction scales are needed that are: (a) valid and reliable; (b) specific enough for meaningful interpretation (versus general, global statements); (c) based upon models with well-defined concepts; (d) actually measuring the concept, satisfaction; and (e) able to allow comparisons across studies and settings.

The Parent Satisfaction Scale (PSS) and the Parent-Staff Interactions Scale (P-SIS), developed to address these needs, measure parents' perceptions of mental health staff providing services to their children. The PSS is made up of direct measures of parents' satisfaction with staff interactions. The P-SIS consists of parents' perceptions of staff interactions. The purpose of this summary is to describe the development, validity, and reliability of the PSS and P-SIS.

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## Methodology

Instrument Development
The literature related to consumer satisfaction and to mental health service delivery to children was reviewed, along with existing consumer and parent satisfaction scales, to identify items for the P-SIS. A total of 76 items were generated. Several conceptual sub-scales were identified, including staff attitudes, staff availability, informing parents, providing support, including parents, and staff helpfulness.

Content and Face Validity
Prior to content and face validity efforts, the 15 items in the conceptual subscale Helpfulness were deleted, as Lebow (1982) suggested, to avoid using outcomes from treatment as part of a satisfaction scale. The remaining 61 items were shared with two parents of children with mental health problems who were also directors of state-wide parent networks. They were asked to rate the items on a 4-point scale from extremely relevant to not relevant; to identify any content areas not included; and to make recommendations about the wording of items. Neither parent completed the rating scale, but did provide

face validity by making suggestions for additional items and wording changes.

The items were also given to five professional experts in children's mental health and/or consumer satisfaction research. An 80% item support criterion was set to retain an item. All items except two met this criteria. With recommendations for wording changes, these two items were reworded and retained. This process established content validity. A total of 12 new items were recommended by the parents and professionals and added to the scale. With consultation from two doctorally-prepared experts in instrument development, the Helpfulness items were returned to the P-SIS because they appeared to be clear measures of parents' perceptions of how staff interacted with them. The P-SIS had 88 items.

It was anticipated that the more positively parents perceived their experience with staff, the more positively they would rate their satisfaction with staff interactions. The 19 item PSS was developed by compiling direct questions about parent satisfaction for each of the conceptually derived P-SIS subscales along with an overall statement of satisfaction with staff to provide construct validity. Two independent items expected to be positively related to the P-SIS were also added for criterion validity including: a) If I needed services for my child again, I would go back to these staff; and b) I would recommend these staff to friends and neighbors with similar problems. All of the items were rated on a 5-point Likert type scale from strongly agree to strongly disagree.

**Sample**
In the first of three waves of testing, the P-SIS (88 items) and the PSS (19 items) were tested with a convenience sample of Indiana support group members with 44 scales completed. After scale revision, the P-SIS (36 items) and the PSS (12 items) were tested with a convenience sample of parents of children discharged from a state, in-patient program, resulting in 24 completed scales. After further revision, the P-SIS (13 items) and the PSS (7 items) were distributed to 160 parents of students with mental health problems (in process at the time of this summary).

**Scale Revision**
The majority of items were deleted due to inter-item correlations above .70, indicating redundancy, with only a couple items deleted due to correlations below .30. The item-total correlation, alpha if deleted, judgment of conceptual desirability, variance, and mean were used to further determine which of the highly correlated items to remove.

To retain an item, it needed to have a high correlation to the total number of items, the alpha if deleted needed to be a significant decrease, the variance needed to be broad enough to show it was sensitive in discriminating the differences among individuals, and/or the mean needed to be relatively close to the midpoint of 3 to limit the positive skew seen in most satisfaction and perception scales (Lebow, 1982).

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## Findings

Reliability and Criterion Related Validity
A high inter-item correlation indicated high internal consistency and provided evidence for both scales' reliability with the alpha for both the P-SIS and the PSS being .98 (N=68). Criterion related validity was evident with the correlation of the P-SIS to independent would return and would refer items of .88 and .87, respectively (N=68). Further, the P-SIS was strongly correlated with the PSS (r=.98).

**Discussion**
The P-SIS and PSS were developed in response to the need to have parent satisfaction instruments with strong psychometric support for use in evaluating parents' satisfaction with services for their children with mental health problems. Validity and reliability of the P-SIS and the PSS were supported. The P-SIS and PSS, having been drawn from a large pool of items, provide specific enough information about parents' perceptions of staff interactions to be meaningful. Clustering of the item means around the mid-point of the 5-point Likert scale and broad standard deviations indicate that the scales capture variability between subjects and do not have the usual positively skewed results seen in most satisfaction measures. These scales should prove useful in gaining information about parents'

satisfaction with and perceptions of staff interactions.

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Janis Gerkensmeyer, R.N., M.S.N., C.S.
*Psychiatric Clinical Nurse Specialist and Doctoral Student*
James Whitcomb Riley Hospital for Children
Indiana University Medical Center and Indiana University School of Nursing
727 East Sherwood Drive
Indianapolis, IN 46240
317/274-0227 Fax: 317/274-3404

Angela Barron McBride, Ph.D.
*Distinguished Professor and University Dean*
317/274-1486 Fax: 317/274-2996
E-Mail: AMcBride@indyvax.iupui.edu

Linda Finke, Ph.D.
*Professor and Associate Dean, Graduate Programs*
317/274-3115 Fax: 317/274-2996

Joan Austin, D.N.S.
*Professor*
317/274-8254 Fax: 317/274-2996
Indiana University School of Nursing
1111 Middle Drive, IUMC
Indianapolis, IN 46202

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8th Annual Research & Training Center Conference Proceedings, Dept of Child and Family Studies, Florida Mental Health Institute, University of South Florida, 1996

# Measuring Perceptions of Family Involvement in Service Provision for Youth with Serious Emotional Disturbance

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## Introduction

Family involvement in the provision of services for youth with serious emotional disturbance (SED) is an important correlate of family empowerment and provides an index of the service delivery system's responsiveness to the needs of families (Able-Boone, Sandall, Loughry, & Frederick, 1990; Collins & Collins, 1990; Dunst & Trivette, 1988; Zimmerman & Rappaport, 1988). Recent empirical work investigating the components of collaboration between parents and mental health professionals revealed family involvement to be of paramount importance in a successful collaborative relationship between parents and professionals (DeChillo, Koren, & Schultze, 1994). Various components of family involvement have been identified in the context of mental health service delivery, including: (a) the continuous involvement of the family in services, (b) appropriate education of the family about services, (c) involvement of the family in all decisions related to treatment, (d) encouraging the family to participate in all phases of the treatment process, and (e) keeping the family updated and informed on the process and progress of treatment (Able-Boone et al., 1990; Brotherson & Goldstein, 1992; Collins & Collins, 1990; Goodman & Hover, 1992).

There is currently no simple, valid, and reliable rating scale that can be used to measure family involvement in the provision of mental health services. Given the importance of family involvement in the provision of services, its measurement and quantification would be a useful step in understanding the nature of the interplay between parents of children with SED and service providers. To this end, the current study examined the psychometric properties of a rating scale designed to measure perceptions of family involvement. The rationale for the scale was based on the concept of empowerment and the assumption that family involvement is intimately linked to empowerment, with more empowered families exhibiting greater involvement in the design and delivery of services for their children with disabilities (Koren, DeChillo, & Friesen, 1992; Singh et al., 1995).
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## Method

### Scale Development

The initial pool of items was obtained through the critical incident method by asking families in focus groups what issues were important to them in the design and delivery of treatment services. These issues were phrased as individual items that could be rated on a Likert scale. Further items were generated that were commensurate with the general orientation of family involvement in the assessment, planning, and treatment of youth with SED. These items were then inspected for conceptual overlap, clarity, and face validity. Thirty items were retained for the final rating scale, with a 5-point Likert rating (1 = strongly disagree to 5 = strongly agree). Two parallel versions of the scale were developed: Perceptions of Family Involvement: Family Version and Perceptions of Family Involvement: Professional Version. The content of the items is identical between the two forms, while the wording of the items is appropriate for parents or professionals.

**Participants**
The Perceptions of Family Involvement: Family Version was completed by 225 parents of children with SED and/or ADHD. Approximately 88% of the parents were mothers, 77% were Caucasian, and 17% were African-American. Most of the identified children were boys (71%), and 61% of the respondents were married. Respondents were evenly distributed among educational and income levels. The mean age of the parents was 41.5 (SD = 8.6) years, and the mean age of the identified child was 13.8 (SD = 4.4) years.

The Perceptions of Family Involvement: Professional Version was completed by 264 mental health professionals. Approximately 40% of the professionals were men, 91% were Caucasian and 5% were African-American, and a majority identified themselves as either counselors or social workers. The modal professional had worked for 11 to 15 years with youths identified as having SED . The mean age of the professionals was 41.1 (SD = 9.1) years.

**Procedure**
The Perceptions of Family Involvement: Family Version was mailed to a sample of parents of children with SED. Parents completed the rating scale and a cover sheet which solicited demographic information. The Perceptions of Family Involvement: Professional Version was mailed to a national sample of mental health professionals who work with children with SED and their families. Professionals completed the rating scale as well as a cover sheet with demographic information.
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## Results

A factor analysis of both versions of the Family Involvement Scale was undertaken to determine the underlying factor structure and the psychometric properties of the scales. A principal components procedure was used for the extraction of factors, with unity (1's) on the diagonal of the correlation matrix for deriving the initial estimates of communality. A varimax (orthogonal) rotation was used to obtain the rotated factor structures. Determination of the number of factors was guided by both statistical and conceptual approaches. Rather than strictly adhering to the eigen value greater than one rule or some other solely mathematical approach for determination of the number of factors to retain (Zwick & Velicer, 1986), solutions of various numbers of factors were examined with the following questions in mind: (a) did each factor make sense conceptually?; (b) was each factor a logical component of the concept of family involvement?; (c) did each factor appear unidimensional without being trivial?; (d) was the solution as a whole a parsimonious representation of family involvement?; and (e) did the factor structure have robust statistical properties?

**Perceptions of Family Involvement:**
**Family Version**
Three- and four-factor solutions of this version were the most conceptually meaningful and statistically sound. Inspection of the scree plot (Cattell, 1978) and the coefficient alpha reliabilities indicated that either of these solutions would be statistically acceptable. However, the fourth factor of the four-factor solution contained three items that did not appear to fit together conceptually. In the three-factor solution two items (17 and 18) did not have a statistically significant loading on any of the factors. The resulting three-factor solution without items 17 and 18 in the analysis was determined to be the most conceptually meaningful and statistically robust.

The three factors together accounted for 66.4% of the total variance. Table 1 presents relevant statistical properties of the factors and their coefficient alpha internal reliabilities. A factor loading of at least 0.40 was used as the cut-off for a significant factor loading of an item. All but two of the items (17 and 18) loaded on at least one factor, and 12 items loaded significantly on two factors. The mean factor loadings for items on Factors I, II, and III were 0.69, 0.63, and 0.67, respectively.

Factor I (Treatment) consisted of 14 items that generally represented family involvement in direct treatment services, including items about treatment satisfaction, follow-up, and treatment planning.

Factor II (Parent-Professional Partnership) consisted of seven items that represented decision making and planning about treatment as well as assessment in partnership with the family. Factor III (Information/Courtesy) consisted of seven items that represented keeping the family informed about the child's treatment, and showing respect and courtesy to the family in the treatment process.

The Guttman split-half estimate of reliability was 0.91 for the final scale. The alpha coefficients for the factors are shown in Table 1. These internal reliability coefficients are large, and indicate substantial internal consistency (DeVellis, 1991). Table 2 presents the Pearson correlations among the factors. The magnitudes of the correlation coefficients are moderately high and all are significant at the $p<0.001$ level. These correlations would suggest that the three components of family involvement revealed by the factor analysis are interdependent.

**Perceptions of Family Involvement: Professional Version**
A five-factor solution of this scale was the most conceptually clear and statistically robust solution. Although Factor V contained only two items, these items loaded together on one factor regardless of the solution examined and it was felt that together they represented a conceptually valid factor. The statistical properties of these factors are shown in Table 3. The five factors together accounted for 61.9% of the total variance. Again, a factor loading of at least 0.40 was used as the cut-off for a significant factor loading of an item. All of the items loaded significantly on unique factors. The mean factor loadings for items on Factors I, II, III, IV, and V were 0.63, 0.65, 0.63, 0.70, and 0.75 respectively.

Factor I (Treatment Planning) consisted of 10 items that represented family involvement in treatment planning, including items about involvement in treatment planning meetings and formulation of a treatment plan. Factor II (Follow-Up) consisted of eight items that addressed issues concerning follow-up after treatment has been completed. Factor III (Decision-Making) included six items that represented family involvement in decisions about meetings, assessment, and the types of services to be provided. Factor IV (Assessment) consisted of four items concerning family involvement in the assessment process. Factor V (Global Involvement) consisted of two global items that concerned family involvement in treatment.

The Guttman split-half estimate of reliability was 0.85 for the entire scale. The alpha internal reliability coefficients for the five factors are shown in Table 3. These coefficients are large, and indicate substantial internal consistency (DeVellis, 1991). Table 4 presents the Pearson correlations among the five factors. The magnitudes of the correlation coefficients were moderately high, with the exception of the correlations of Factor V with the other factors, and all are significant at the $p<0.05$ level. These correlations would suggest that four of the components of family involvement revealed by the factor analysis are interdependent, while the Global Involvement factor only weakly correlates with the other four factors.
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## Implications

The results of the factor analyses of the parallel forms of the Family Involvement Scale indicate that the concept of family involvement is a valid construct, and the instrument devised to measure it has robust psychometric properties. The two forms of the scale yielded somewhat different factor structures. The factors of the professional version paralleled the service delivery process more closely than the factors from the family version, which were more global. This is perhaps reflective of differences between professionals and families in the level of knowledge and perception of the mental health service delivery system. These scales will provide a useful tool for service providers wanting to assess the level of family involvement in services. Utilizing both forms will reveal discrepancies between professionals' and families' perceptions of family involvement, and will reveal areas where families perceive deficiencies in their involvement in services.
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W. John Curtis, M.A.
Research Associate
Commonwealth Institute for Child and Family Studies
804/828 2348 Fax: 804/828-2645
E-Mail: wjcurtis@gems.vcu.edu

Nirbhay N. Singh, Ph.D.
Professor of Psychiatry and Pediatrics
Clinical Professor of Psychology
804/828-4393 Fax: 804/828-2645
E-Mail: nnsingh@gems.vcu.edu

Robert Cohen, Ph.D.
Professor of Psychiatry
804/828-3146

Correspondence for all authors:
Medical College of Virginia/VCU
Department of Psychiatry
P.O. Box 980489
Richmond, VA 23298-0498

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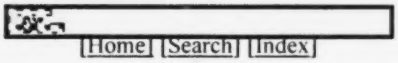

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Table 1
Factor Properties of the
*Family Involvement Scale: Family Version*
($N$ = 225)

| Factor | Eigenvalue | Percent Variance | Coefficient Alpha |
|---|---|---|---|
| I | 15.48 | 55.3 | 0.96 |
| II | 1.86 | 6.6 | 0.90 |
| III | 1.25 | 4.5 | 0.90 |

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Table 2
Pearson Correlation Coefficients of the Three Factors of the *Family Involvement Scale: Family Version* ($N = 225$)

| Factor | I | II | III |
|---|---|---|---|
| I | 1.00 | 0.77 | 0.68 |
| II | | 1.00 | 0.71 |
| III | | | 1.00 |

Note. All correlation coefficients are significant at $p < 0.001$.

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Table 3
Factor Properties of the
*Family Involvement Scale: Professional Version*

| Factor | Eigenvalue | Percent Variance | Coefficient Alpha |
|---|---|---|---|
| I | 10.97 | 36.6 | 0.90 |
| II | 2.65 | 8.8 | 0.87 |
| III | 2.11 | 7.0 | 0.85 |
| IV | 1.48 | 4.9 | 0.85 |
| V | 1.36 | 4.5 | 0.72 |

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Table 4
Pearson Correlation Coefficients
of the Five Factors of the
*Family Involvement Scale: Professional Version*
(*N*=204)

| Factor | I | II | III | IV | V |
|---|---|---|---|---|---|
| I | 1.00 | 0.60 | 0.61 | 0.55 | 0.22 |
| II | | 1.00 | 0.47 | 0.53 | 0.19 |
| III | | | 1.00 | 0.63 | 0.14 |
| IV | | | | 1.00 | 0.19 |
| V | | | | | 1.00 |

Note. All correlations are significant at $p < .001$.

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8th Annual Research & Training Center Conference Proceedings, Dept of Child and Family Studies, Florida Mental Health Institute, University of South Florida, 1996

# Families' Perception of the Effects of Respite

Authors

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## Introduction

Respite care is the formal mechanism for providing short-term care to children with disabilities to provide relief to parents or other caregivers from the stress of child care. Respite care represents one highly effective mechanism in achieving the mission and policy of public mental health systems to reduce the consequences (frequency and intensity) of disability, impairment, disturbance, or illness for children, their families and their communities. Its beneficial effect on family functioning and crucial role in preserving families is well documented. It should be a prominent element in achieving the mission and policy of public mental health systems as they shift from institutionally based, pathologically focused, and professionally driven paradigms to community based, strength focused, consumer driven paradigms.

Families report respite care to be an important source of support in their efforts to raise their children with special needs. The effects that families experience when using respite care are not uniform. This paper will examine the relationship among parents' perceptions of the impact of respite care, their level of social support, and intra-family resources' (money and time) availability on their stress.
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## Method

### Procedures

A total of 319 families out of 889 families (35.9%) at nine county-based community mental health programs volunteered for the study. Interviews were conducted by telephone using trained interviewers and computer assisted interviewing technology with 162 randomly selected families. A follow-up survey was mailed to each parent who was interviewed with 150 returning the survey. This follow-up survey contained Friedrich's (1983) Short-form of the Questionnaire on Resources and Stress (52 items), Dunst's (1988) Family Support Scale (19 items), and Family Resource Scale (31 items).

The majority of families were white and had an average income between $20,000 and $29,999 (see Table 1). Respondents were primarily female, i.e., mothers, with an average age of 44.13 years (SD = 13.31) and had completed high school or more schooling (89.5%). The largest percentage of respondents did not work outside of the home. Two-thirds of the interviewed families were two parent families. When compared to the service population of 889 families, the 162 interviewed families were not statistically significantly different in terms of ethnicity but did have higher income levels.

The average age of the children (which included adult children) was 16.82 years (SD = 12.70). Slightly more than half the children were male (see Table 2). Mental retardation was the most frequent primary diagnosis. The extent to which children's disabilities affected their functioning is presented in Table 3. Mental development, physical mobility, and ability to communicate were rated by the parents as somewhat to greatly affecting functioning. Parents assessed their children's need for assistance with every day activities as nearly total. They indicated that their children required specialized medical care several times per month and had major behavior problems at least once a week, on average.

**Analysis**
Eight variables were selected to represent the major conceptual domains of a stress adaptation model (Singer & Irvin, 1991; Wikler, 1986) in the path analysis (see Figure 1). Seven of these domains served as independent variables: (1) presence of a spouse (0 = no, 1 = yes); (2) amount of care required by the child, calculated by summing the scores on the six functioning variables (a = .61); (3) perceived helpfulness of the parent's social support network as measured by the total scale score on the Family Support Scale low score = not helpful, high score = extremely helpful, a = .80). Intervening variables were: (4) adequacy of money resources measured by the mean score on seven items from the Family Resource Scale related to money (a = .90, 1 = not adequate and 5 = always adequate); (5) frequency of use of respite care during the last six months measured on a five-point item as part of the telephone interview (1 = not used, 2 = less than once per month, 3 = 1 to 3 times per month, 4 = once a week, 5 = more than once a week; (6) parent's perception of the adequacy of relief from childcare measured using one item from the Family Resource Scale that ask about the adequacy of baby sitting ( 1 = not adequate, 5 = always adequate); (7) perception of the adequacy of time resources measured by the mean score on nine items from the Family Resource Scale related to time (a= .86, 1 = not adequate and 5 = always adequate). The dependent variable was (8) parental perception of stress as measured by the Questionnaire on Resources and Stress (QRS-F). Total scale score was used (a = .92) where a low score indicated low stress and a high score indicated high stress. Mean scores for these variables are presented in Table 4.
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## Results

**Bivariate Analysis**
Use of respite was negatively correlated (-.25) with adequacy of money resources and with the adequacy of time resources (-.24). This suggests that families with better financial situations are less likely to obtain childcare from public services. The use of respite care was positively correlated (.24) with stress. These observations indicate the need to understand the combination effects of other variables with the use of respite on perception of stress.

**Path Analysis**
The hypothesized path flow is depicted in Figure 1 and includes the significant bivariate relationships. Multiple regression analyses were conducted regressing each variable on all variables preceding it in the model. Figure 2 displays the relationships among the variables with significant betas ($p < .05$). The path flow shows the amount of respite received increased as the child's disability became more severe and decreased as the adequacy of money resources increased. The child's disability level affected perception of the adequacy of time resources directly, with time decreasing and stress increasing as level of disability increased. Disability level had an indirect effect on adequacy of time resources through adequacy of money resources (Variable 4, indirect effect = -.11), which acted as a moderator variable on time resources. The child's disability level also had a direct effect on stress, increasing stress as disability level increased, and a strong indirect effect via perception of time resources (Variable 7, indirect effect = .19) decreasing the adequacy of time resources. The presence of a spouse only indirectly affected stress level, with the strongest path via adequacy of money and time resources. Helpfulness of the social support network had virtually no effect on perception of stress.

The amount of respite care and adequacy of baby sitting has only indirect effects on perception of stress. For both variables, this effect was via the effect on time resources. The adequacy of money resources was negatively related to respite but positive related to adequacy of baby sitting. This suggests that while better financial situations resulted in less publicly supported childcare, it was balance by the ability to purchase or find childcare from other sources. The indirect effect of respite care is small (-.03) while the indirect effect of adequacy of baby sitting is much stronger (.12). For both variables, positive changes result in decreased stress by improving the parent's perception of time resources.
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## Conclusions

The path analysis demonstrated the complex set of relationships that control the effective impact of respite care on parental perception of stress. One of the outcomes expected for respite care is a reduction in stress. This analysis suggests that respite care indirectly reduces stress by affecting the availability of personal time for the parent. Not surprisingly, the child's level of disability was found to be a dominant factor, directly and indirectly moderating the affects of time and money resources and respite care. When the relationship between respite care and parental perception of stress was viewed independent of other variables, respite care did not appear to have a positive impact. However, when the relationship of respite care to stress is viewed with the context of other variables (e.g., the child's level of disability, adequacy of monetary resources, and the adequacy of baby sitting), its positive effects on parental perception of time resources and through time on stress become evident.

The role of monetary resources and its interaction with the use of respite care was also evident in the path model. This model suggests that public programs can affect the amount of stress experienced by parents by providing respite care. However, in the amount provided by typical programs, respite care is likely to have only a marginal effect on stress. Adding money resources to the family system as through cash subsidy program is likely to have a greater impact on stress levels. These analyses suggest that a combination of respite care and cash subsidies may be a stronger intervention than either alone.

The strong role of time adequacy in relationship to parental stress also suggests that interventions with families need to assess parent's perceptions of time for themselves and provide supports that increase the time and opportunities parents have to care for themselves. Respite care clearly has the potential to do this but will need to be matched to parents' personal level of need as well as the child's needs.
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Sandra E. Herman, Ph.D.
Program Evaluator
Services Research Unit
Michigan Department of Mental Health
Lewis Cass Building
320 So. Walnut
Lansing, MI 48913
517//335-0130 Fax 517/335-3090

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Table 1

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Table 1
Respondent Characteristics for Sample of Families of Children with Developmental Disabilities

| Characteristic | Percent |
|---|---|
| Respondent's gender | |
| % female | 91.4 |
| Age of respondent (years) | |
| 25 or younger | 4.8 |
| 26 to 35 | 22.9 |
| 36 to 45 | 36.0 |
| 46 to 55 | 13.0 |
| 56 to 65 | 14.2 |
| 65 or older | 9.2 |
| Family ethnicity | |
| African-American | 7.4 |
| Caucasian | 85.2 |
| Other | 7.4 |
| Household income | |
| less than $20,000 | 39.9 |
| $20,000 to 39,999 | 44.9 |
| $40,000 to 60,000 | 7.6 |
| more than $60,000 | 7.6 |
| Employment status | |
| employed full or part time | 35.8 |
| not employed outside of home | 64.2 |
| Two parent households | 69.1 |

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Table 2
Characteristics of Children with Developmental Disabilities

| Characteristic | Percent |
|---|---|
| **Primary Diagnosis** | |
| Mental retardation | 42.1 |
| Cerebral palsy | 23.0 |
| Autism | 9.9 |
| Other | 25.0 |
| **Age (years)** | |
| 0 to 4 | 13.3 |
| 5 to 10 | 23.4 |
| 11 to 17 | 27.2 |
| 18 to 25 | 13.3 |
| 26 or older | 22.8 |
| **Gender** | |
| % male | 53.9 |

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Table 3
Functional Characteristics of Children with Developmental Disabilities

| Variable | Mean | *SD* |
|---|---|---|
| Extent of disability affects ① | | |
| mental development | 3.84 | 1.12 |
| physical mobility | 3.12 | 1.36 |
| ability to communicate | 3.59 | 1.26 |
| Amount of assistance with everyday activities ② | 4.18 | 1.81 |
| Frequency of specialized medical care ③ | 2.50 | 1.14 |
| Frequency of major behavior problems ③ | 3.13 | 2.05 |

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Figure 1
Hypothesized Path Flow Chart

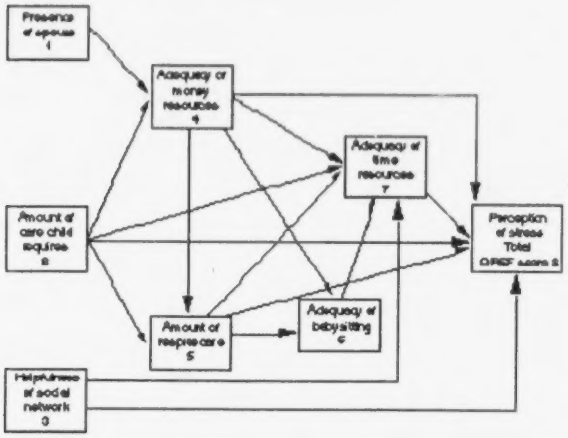
Presence of spouse f
Adequacy of money resources q
Adequacy of time resources r
Amount of care child requires a
Perception of stress Total CRISF score s
Amount of respite care t
Adequacy of babysitting c
Helpfulness of social network o

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Table 4
Mean Scores on Path Analysis Variables

| Variable | Mean | *SD* | Range |
|---|---|---|---|
| 1. Presence of spouse | 69.10% | | |
| 2. Amount of care child requires | 6.97 | 3.42 | 0 to 15 |
| 3. Helpfulness of social network | 3.12 | 1.09 | 1.06 to 9.00 |
| 4. Adequacy of money resources | 3.35 | 1.09 | 1 to 5 |
| 5. Amount of respite care | 2.49 | 1.35 | 1 to 5 |
| 6. Adequacy of babysitting | 2.49 | 1.49 | 1 to 5 |
| 7. Adequacy of time resources | 3.33 | 0.91 | 1.13 to 5 |
| 8. Perception of stress | 22.68 | 12.59 | 0 to 49 |

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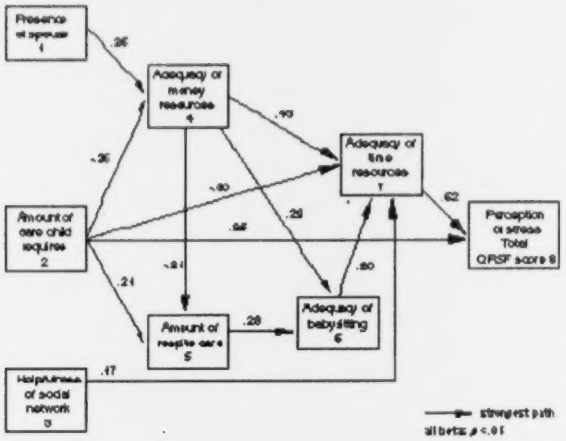
Figure2
Path Analysis Flow Chart

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8th Annual Research & Training Center Conference Proceedings, Dept of Child and Family Studies, Florida Mental Health Institute, University of South Florida, 1996

# Parent-Professional Collaboration: A Pilot Study of Parents as Researchers

Authors

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## Current Trends in Children's Mental Health

Central to the efforts to enhance the delivery of broad based services to families of children with severe emotional and behavioral problems is the recognition that a new philosophy and set of practice values must be a fundamental part of systems change (Behar, 1988; Burchard, et al, 1991; Homonoff & Maltz, 1991). This new philosophy (e.g., Lourie, et al, 1990; Raiff, 1990; Ronnau, 1991; Stroul & Friedman, 1986; Ventura County Children's Mental Health Services Demonstration Project, 1987) focuses on such values as emphasizing family and child strengths, respecting the needs, wants and desires of families and children, and maintaining children in the most family-like environment.

Significant progress has been made in developing child and family services grounded in a family strengths based philosophy (e.g., Stroul, 1993), however, to date, programs are only just beginning to incorporate the family strengths, family based perspective into program evaluation research design and methodology. If we are to maintain our commitment to empowering families from a strengths based perspective, and to expand the opportunities for enhanced parent-professional collaboration, we must develop innovative methodologies which consider families as full participants in all aspects of ongoing program evaluation research.

This summary describes one project, undertaken in the State of Maine, to involve parents as researchers in collaborative action research. Collaborative action research suggests that each group represented in the process "shared in the planning, implementation, and analysis of the research and that each contributes different expertise and a unique perspective" (Oja & Smulynam, 1989; p. 1). Collaborative action research represents an attempt to empower people proactively, and to study research problems which arise out of a community, rather than solely through the eyes of the researcher. In collaborative action research, parents and researchers work together to set common goals and mutually plan the research design, collect and analyze data, and report results. Collaboration assumes that researchers and parents will communicate frequently and openly throughout the process to avoid possible conflicting perceptions and assumptions which result from their different perspectives.
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## The Intensive Child Case Management Program

This pilot study grew out of an ongoing program evaluation of a new intensive child case management program in the state of Maine. The intensive child case management services are part of a continuum of child and adolescent mental health services developed and implemented by the state of Maine Department of Mental Health and Mental Retardation. This continuum of services (e.g. child case management, crisis services, community-based residential services, etc.) was legally mandated following agreement of a class action suit between mental health consumer groups and state mental health and human services officials, resulting in a substantial decrease in the number of state hospital beds for adults, a virtual elimination of state hospital beds for children and adolescents, and

increased funding allocations for improving and expanding community based mental health services. Six agencies were awarded four year contracts with the state department of mental health to provide intensive child case management services.

We were interested in understanding parents' perceptions regarding their involvement and satisfaction with intensive child case management services; therefore, we proposed a collaborative research model in which parents were active participants in all aspects of the evaluation of parent satisfaction.

We want to emphasize several important points about this pilot project:

- This is a small pilot study&shyp;we were only funded for $5,000. Money is nice, but you don't have to have a lot of it!
- We are trying to accomplish the project in an incremental fashion by using this model in one region of the state, and then replicating our efforts in other regions.
- Above all, we wanted to develop and refine family strengths based research methodology that was "family friendly" and could be used by the families themselves.

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## The Pilot Study

First, we conducted two focus groups with parents of children with serious emotional and behavioral disabilities (who received case management services) in order to obtain parents' recommendations regarding the conduct of family strengths based research, and to recruit for parent researchers.

What did we find?

1. Parents want evaluation research that doesn't exclusively focus on family dysfunction and problems.
2. Parents feel blamed and judged by professionals already&shyp;they don't want to be evaluated from a problem focus.
3. Parents want researchers to spend more time with them&shyp;i.e., "Come to our houses and spend some time with us in order to more accurately observe our family and child situation."
4. Parents believe that there is no accountability in the system for child outcomes, and they want evaluation of service providers to stress accountability and responsiveness to families and children. They want an accountable system, which includes ongoing assessment, quality assurance and evaluation.
5. Parents want more collaboration among providers and parents&shyp;and this includes researchers. Parents want to participate in the evaluation process through periodic updates, ongoing participation in focus groups and participation in data collection.

**Recruitment of Parents as Participants on the Research Team**
We recruited parent-researchers from participants in the focus groups. Due to budget constraints on the project, only one parent was able to get paid and work on the project. The parent-researcher kept a notebook of her experiences, feelings and thoughts as she participated in this project.

**Creation of Semi-Structured Interview**
Based on thematic analysis of the focus groups' discourse, we developed a semi-structured interview aimed at discovering parental satisfaction with intensive child case management services. The interview consisted of open-ended questions related to characteristics of the child and family, parental satisfaction

with the system of care, service needs and barriers, and history of service use. We spent time assessing the interview format in order to insure that the interview was strengths based and family and child focused.

We taped the interviews and transcribed the notes, working in teams for the purpose of conducting interviews. The evaluator did the initial interview with the parent-researcher observing. Next, the parent-researcher completed two interviews as the lead interviewer, with the evaluator as the observer. After each interview, we processed how the interview was conducted, what could be changed and what was working well. Four interviews have been completed to date.

What have we learned so far?

1. Families find great satisfaction with a case manager who does not take over, causing the family to be totally dependent on them, but rather offers suggestions and service options to help the family find out what it is that works best for them.

2. Families are pleased when they do not receive criticism, but instead are given unconditional acceptance from their case manager, being applauded for what the family feels are their successes.

3. Families appreciate and benefit from a case manager who encourages a family to ask questions and does not appear to perceive them as a nuisance when they do so. Case managers should give families adequate information to insure the best possible communication between them.

4. Families also appreciate case managers who perceive the family as being comprised of individuals who are part of the same whole. Much consideration of other family members' needs must be taken into account, strengthening the entire family, if the child is to succeed within her or his own home.

5. Families want and expect a case manager to advocate with them on a consistent basis with the schools, their communities, and local and state government, and not remain in the background simply hoping that change will magically come about. They want their case managers to be knowledgeable about services and to make a strong stand that will directly effect the creation and availability of child and adolescent mental health services.

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## Comments from the Parent-Researcher

Parents as researchers can serve as role models of empowerment for families who are being interviewed. It is empowering for families to perceive others parents of children with SED as being a valued part of the research process which can directly effect change in the way mental health services will be delivered in the future. Parents of children with SED are often perceived as dysfunctional by professionals in the system and may be reluctant to confide&shyp;fearing blame for their children's illness. Such is not the case when families converse with one another.

Families who have experienced similar difficulties with the system have little if any difficulty confiding their problems to each other. Parents have remarked during the interview that I "must know how they feel," and they visibly relax. I feel that a climate of trust directly effects the amount of detailed information that can be elicited. Families experience validation when asked to share their "stories" with another parent. Parent researchers assume a unique and important role for families, serving to authenticate families' experiences through the interview process.

As a parent researcher who has had the opportunity to interview other parents about their child's case management service, I have some recommendations for the training of parent researchers:

- Give parent researchers the opportunity to explore their own value conflicts and prejudices before they conduct their first interview . I experienced the awful reality of such prejudice during my first encounter with a parent subject in her home. Her home did not meet my standards of cleanliness, and for a brief moment I wondered if the reason why her children were so ill was because of living in such an environment. Fortunately, a light of recognition went off in my head, and I was forced to take a long hard look at my own value conflicts.

- Parent researchers need training to understand the different styles of communication they may encounter in interviews. I am a talkative person, and found I needed to slow down for a more quiet parent.

- Parent researchers need the opportunity to practice interview skills. Prospective parent researchers should practice interviews with one another. They should focus on tact, diplomacy and speaking clearly so families can easily comprehend. Their goals should include developing good listening skills to extract the meat from the dialogue, learning to probe for information&shyp;while not being overly invasive and interrogatory&shyp;and being careful not to overwhelm the subjects being interviewed.

- Parent researchers need practice learning to focus on the parent subjects, and allowing the home environment to provide added information without distracting researchers from the purpose of their visit. My first home interview involved kids, phones, dogs and other interruptions. I needed to "go with the flow."

- Give parent researchers many opportunities to discuss their own feelings of distress when listening to a subject who is expressing similar painful issues that may mirror the interviewers own experiences. Provide parent researchers with a mechanism to deal with those feelings, both for themselves and for the integrity of the interview, so that there is no subtle hint of leading the subject into an area which may serve to validate the interviewer, but which could contaminate that interview with bias.

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Gail B. Werrbach, Ph.D., LCSW
Associate Professor
School of Social Work
Annex C
University of Maine
Orono, ME 04469
207/581-2386 Fax: 207/581-2396

Laura Perry
Child and Adolescent Advisory Board
Bangor, Maine 04401

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8th Annual Research & Training Center Conference Proceedings, Dept of Child and Family Studies, Florida Mental Health Institute, University of South Florida,1996

# The Significance of V61.xx - Family Problems in Mental Health Care for Children

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## Introduction

With completion of field trials for the American Psychiatric Association Diagnostic and Statistical Manual, 4th edition (DSM-IV; APA, 1994), we have further refined psychiatric nomenclature. One problem, however, is that children and families having difficulties do not always fit into present diagnostic schemes. This noncon-formity may be to the detriment of mental health clinicians and the children and families they treat. It also may lead to an inability to access services.

For example, a recent ruling in one state requires a child to have a major psychiatric diagnosis in order for child guidance clinic resources to be allocated; the non-specific DSM-IV diagnosis of Family Problems-V61.xx is not sufficient criteria for the allocation of services. Clinical experience suggests, however, that Family Problems may be the salient presentation for a child and family who are considerably distressed and can make significant use of clinical assistance. For many of these families, the focus of the clinical effort is toward locating the source of distress.

The hypothesis tested in this study was that children who present with Family Problems (V61.xx) are as distressed and make use of clinical assistance as much as those with major DSM-IV psychiatric diagnoses.
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## Method

### Setting

This study used data from a chart review of a child guidance center located in a community mental health center. The child guidance center was the sole child mental health practice in the community, had a sliding fee, and was state funded and completely independent of third party payers. The community in which the child guidance center was located was a suburban working class community of 54,000, with a median household income of $35,000-40,000. Six percent of the households were below poverty level in income, while 2.6% of the households had incomes above $100,000. The racial/ethnic mix of the community was 82% Caucasian, 12% African American and 5% of other ethnic origins.

### Measurements

This study used a retrospective record review of all children seen in a single community mental health center. Information abstracted from the records included:

- Demographic information
- All diagnoses
- Dates of all visits

- Child global assessment scores, when available

The diagnosis of Family Problems and five psychiatric diagnoses (Adjustment Disorder, Dysthymia, Oppositional Defiant Disorder, Conduct Disorder and Major Depression) were examined in detail with regard to:

- Number of additional diagnoses
- Follow-up time
- Number of visits
- Child global assessment scale scores on presentation

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## Results

Six hundred thirty eight children were seen more than once between July 1980 and December 1993 in this community child guidance clinic. The racial mix of children seen in the clinic matched the racial mix of the community. The average age of the children was 10 years old, and these children were seen for an average 16 visits (SD=19). The average child global assessment scores for 376 of these children was 61 ± 10 (range 20 to 85).

Family Problems was found to be a presenting problem in 55% of the children who presented, and in 26% of these children, it was the sole diagnosis. Family Problems (9.6 yrs), adjustment disorder (9.8 yrs) and oppositional defiant disorder (9.4 yrs) tended to present at a younger age than dysthymia (12.0 yrs), major depression (13.3 yrs) and conduct disorder (12.3 yrs). The average child global assessment score for children with a diagnosis of Family Problems was 63, and only children with conduct disorder and major depression had CGAS scores that were statistically significantly lower than children with family problems.

Children presenting with Family Problems were followed for as long and for as many visits as most other psychiatric diagnoses. On subsequent presentations, these children many times presented with more prominent psychopathology. For example, of the 209 children who presented to the clinic for a second set of visits, 51 presented with dysthymia, 45 presented with oppositional defiant disorder, 18 with drug and alcohol problems, 15 with attention deficit disorder, 15 with conduct disorder, and 15 with major depression. Five children subsequently presented with either psychosis or bipolar disorder.

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## Conclusion

Family Problems is a common diagnosis in a child guidance clinic population. Although the inclusion of nonspecific diagnoses such as "V" codes may seem as an invitation for children and families with less severe disturbances to use services, this study demonstrates that these children may be just as impaired as other children with major psychiatric diagnoses. A diagnosis of Family Problems is not predictive of less need. Results are also consistent with the hypothesis that Family Problems may be the initial presentation of chronic disability in some cases. These tentative conclusions are provocative with respect to preventive mental health care and the line between acute psychiatric manifestations and chronic social disability. In addition, children presenting with Family Problems tend to be younger, which has secondary preventative implications.

The clinic used in this study was not constrained by pressures that normally require the use of Axis I diagnoses in order to allocate resources. It is for this reason that the "V" codes of Family Problems could

be used as a sole diagnosis. When clinicians are required to use Axis I diag-noses, as they are in most clinical settings, conflicts arise. Any diagnostic nomenclature will have inherent limitations, including the difficulties of categorization which lead to the social stigma of labeling. In addition, our present nomenclature does poorly in characterizing younger children. Clinicians may be forced to use diagnoses that are not appropriate due to these limitations.
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Theodore Fallon, Jr., MD, MPH
Associate Research Scientist
Yale Child Study Center
P.O. Box 207900
New Haven CT 06520-7900
203/785-3488 Fax: 203/785-7611
E-Mail: TFALLON@biomed.med.yale.edu
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8th Annual Research & Training Center Conference Proceedings, Dept of Child and Family Studies, Florida Mental Health Institute, University of South Florida, 1996

# The Influence of Family Functioning on the Incidence of Conduct Disorder Among Children and Adolescents

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## Introduction

The prevalence of conduct disorder among children and adolescents is quite disturbing given that conduct disorder is often identified as a precursor of more severe emotional and behavioral problems (Graham & Rutter, 1973). Empirical research examining causes of conduct disorder typically focus either on family functioning (Greenberg, Speltz, & DeKlyen, 1994; Patterson, Reid, & Dishion, 1992) or peer relationships and school context (Coie & Jacobs, 1993; Coie, Dodge, & Kupersmidt, 1990). From a developmental perspective, examining associations between conduct disorder and family relationships is critical because these are children's first relationships (Ainsworth, 1989). Theoretically, family relationships are expected to be resistant to change because these relationships and interaction patterns have been in place longer than ot
her social relationships (Martin, 1987).

Given the potential impact of family on conduct disorder, this investigation sought to examine associations among family functioning and conduct disorder among children and adolescents currently receiving mental health services. Specifically, the present investigation was designed to answer three questions. First, how stable are family functioning characteristics and children's conduct disorder over a six-month interval? Second, what is the nature of the relationship between family functioning and children's conduct disorder? Finally, is the association between family functioning and conduct disorder dynamic with changes in family functioning being associated with changes in children's behavior?
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## Methods

### Subjects

All data included in this investigation were collected as part of the Fort Bragg Evaluation Project (FBEP; Bickman, Heflinger, Pion, & Behar, 1992) and included 5 to 17 year old children and their parents. Of the 819 participating children, 519 were male. The majority of children participating were Caucasian (72%), and resided with two parents (either biological or step-parents: 87%). Twenty-six percent were clinically diagnosed as having a conduct disorder (see Table 1).

### Measures

Data collected from the first two assessments of the FBEP were included. Time 1 data were collected upon entry into mental health services and time 2 data were collected six months later. While not all families were seeking services for conduct disorder, all families were soliciting services for children's mental health problems. Parents participated in structured interviews and completed a variety of measures at times 1 and 2, some of which included assessments of family functioning and children's conduct disorder.

*Family Functioning*

Parents completed the Family Inventory of Life Events (McCubbin, Patterson, & Wilson, 1981). Seventy-one items were dichotomously rated as yes or no by parents. If the event had occurred within the past six months, parents responded yes. The family conflict, marital strains, and pile up of stress subscales were used in these analyses. Parents also completed the Family Assessment Device (Epstein, Baldwin, & Bishop, 1983). Parents rated 60 items on a 4 point Likert scale (strongly agree to strongly disagree) in terms of how much it described their family during the previous six months. The problem-solving/communication, affective responsiveness, affective involvement, general functioning, and behavioral control subscales were included.

*Conduct Disorder*
To assess children's level of conduct disorder, parents completed the Child Assessment Schedule (CAS; Hodges, Kline, Stern, Cytryn, & McKnew, 1982) and the Child Behavior Checklist (Achenbach, 1991). The acting out subscale from the CAS and the delinquency and aggression subscales from the CBC were used to index conduct disorder. These three scores were significantly correlated and were standardized and summed to create the conduct disorder composite.
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## Result and Implications

The goals of this investigation were to determine the relative stability of family functioning and children's conduct disorder over time, the relationship between levels of family functioning and concurrent and subsequent child behavior, and the associations among family functioning and changes in children's behavior. Before addressing these questions, the family functioning and conduct disorder variables were compared by age and gender. While few gender differences emerged, age was significantly associated with all variables, except marital strains, such that having an older child was indicative of greater functioning and behavioral problems across both time intervals.

*To determine the relative stability of family functioning and conduct disorder over time.*

Stability was assessed by correlating time 1 and time 2 scores (see Table 2). Family functioning showever, these correlations were low enough to indicate that, while time 1 functioning may be a good predictor of time 2 functioning, time 1 scores were not a perfect predictor of time 2 functioning. Children's conduct disorder scores were somewhat more stable across the 6 month interval, but change in conduct disorder was also apparent.

*To determine the relationship between level of family functioning and concurrent and subsequent conduct disorder.*

Three hierarchical regression equations were computed to examine the relationships between family functioning and children's behavior. In each regression equation children's age and gender were entered first and accounted for 1-2% of the variance associated with conduct disorder. Of particular interest was the amount of change in R2 upon entry of the family functioning variables (see Figure 1). Time 1 family functioning resulted in a significant change in R2 when predicting time 1 conduct disorder and accounted for 22% of the variance. Similarly, time 2 family functioning variables resulted in a significant change in R2 and explained 28% of the variance associated with time 2 conduct disorder. Time 1 family functioning variables resulted in a significant change in R2 when predicting time 2 conduct disorder and explained 12% of the variance.

In sum, family functioning was significantly associated with concurrent levels of conduct disorder across both time intervals. Thus, families who are functioning poorly are likely to have children who are experiencing behavioral problems. A relationship between levels of family functioning at time 1 and conduct disorder at time 2 was also found, however, this lagged relationship was not as strong as concurrent associations between family functioning and conduct disorder. Since level of family functioning at time 1 was not as strongly associated with children's time 2 behavior as family functioning at time 2, change in functioning may be occurring.

*To determine whether family functioning was related to changes in children's behavior from time 1 to time 2 .*

In determining the relationship between family functioning and changes in children's behavior, residual change scores were used to parallel the multiple regression methodology of the previous analyses. In the first step of each equation, children's time 1 conduct disorder scores were entered and accounted for 49% of the variance of time 2 conduct disorder. Thus, the remaining variance is variance which is independent from conduct disorder at time 1, or changes in conduct disorder from time 1 to time 2. In each of these three equations, age and gender were entered in the second step and resulted in no change in R2. Finally, the family functioning variables were entered. As with the previous regression equations, the focus was on the amount of change in R2 associated with entry of the family functioning variables in predicting change in conduct disorder (see Figure 2). Thus, separate regression equations were computed with family functioning at time 1, at time 2, and changes from time 1 to time 2 entered in the third step.

When predicting changes in children's behavior from time 1 family functioning, no significant change in R2 emerged. Time 2 family functioning resulted in a significant change in R2 of .10 when predicting changes in children's conduct disorder from time 1 to time 2. To examine the association between changes in family functioning and changes in children's conduct disorder, time 1 family functioning scores were entered. Since time 1 family functioning scores correlated significantly with time 2 functioning scores, these commonalities were partialled out. Entry of the time 2 family functioning variables resulted in a significant change in R2 of .11, indicating that changes in family functioning from time 1 to 2 were associated with changes in children's behavior from time 1 to time 2.

These regressions were designed to examine the relationship between family functioning and change in children's conduct disorder. The results indicate that level of family functioning at time 1 was not a good indicator of change in children's behavior, rather children's behavior changed independently of families previous functioning. Time 2 family functioning and changes in family functioning were good indicators of change in children's behavior. Thus, children who are receiving treatment, and the families in which they reside, seem to be changing together.

In conclusion, all children in this sample were receiving mental health services, although not necessarily for conduct disorder. Across both time periods, family functioning, and to a lesser extent, children's behavior, were not stable. Determining causation is difficult. One possible explanation of these results is that changes in children's behavior led to changes in family functioning. Alternatively, changes in family functioning, for instance, reduction in stress or improved communication skills, may result in improvements in children's behavior. From a family systems perspective, both of these hypotheses are valid. Systemically, change in one domain should influence change in another. Thus, a model of reciprocal causality may be needed, such that changes in children's behavior lead to changes in family functioning which causes further changes in behavior. Further research examining this more dynamic view of families and children is clearly needed.

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Laura V. Scaramella, Ph.D.
Center for Mental Health Policy
Vanderbilt University
1207 18th Ave. S.
Nashville, TN 37212
615/343-2705 Fax: 615/322-7049
E-mail: scaramella@uansv5.vanderbilt.edu
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This research is supported by the U.S. Army Health Services Command (DA-DA10-89-C-0013) as a subcontract from the North Carolina Department of Human Resources/Division of Mental Health, Developmental Disabilities and Substance Abuse Services, and a grant to Dr. Leonard Bickman (RO1MH-46136-01) from the National Institute of Mental Health.

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Table 1
Demographic Characteristics of Participating Children

| | |
|---|---|
| Children Participating (N) | 819 |
| Age | |
| 5 to 8 | 223 |
| 9 to 12 | 221 |
| 13 to 17 | 375 |
| Gender | |
| Boys | 519 |
| Girls | 300 |
| Ethnicity | |
| White | 72% |
| African-American | 16% |
| Hispanic | 9% |
| Other | 3% |
| Clinical Diagnosis of Conduct Disorder | 26% |
| Caregiver Status | |
| 2 caregivers | 87% |
| 1 caregiver | 13% |
| Family Size (including participating child) | |
| 2 individuals | 4% |
| 3-4 individuals | 58% |
| 5-6 individuals | 34% |
| >7 individuals | 4% |
| Parents' Education | |
| Some High School | 1% |
| High School Graduate | 16% |
| Some College | 56% |
| College Graduate | 15% |
| Some Post-College | 5% |
| Advanced Graduate | 7% |
| Family Income | |
| < $10,000 | 3% |
| $10,000-$19,999 | 27% |
| $20,000-$29,999 | 37% |
| $30,000-$39,999 | 19% |
| > $40,000 | 14% |

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Table 2
Correlations Between Time 1 and Time 2 Family Functioning and Children's Conduct Disorder

| | *r* value |
|---|---|
| Family Functioning | |
| 1. Family Conflict | .42* |
| 2. Marital Strains | .40* |
| 3. Pile-up of Stress | .54* |
| 4. Problem-Solving & Communication Skill | .59* |
| 5. Affective Responsiveness | .59* |
| 6. Affective Involvement | .55* |
| 7. Behavioral Control | .57* |
| 8. General Functioning | .60* |
| Conduct Disorder | .70* |

* $p < .000$

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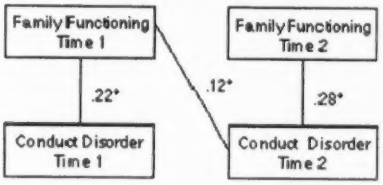
Figure 1
Hierarchical Regression Equations
Predicting Children's Conduct Disorder:
Change in $R^2$ Values after Controlling
for Age and Gender




*p<.001

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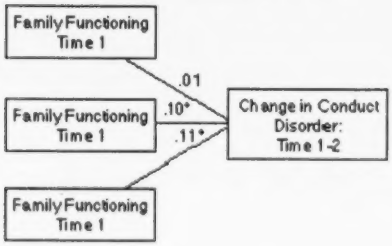
Figure 2
Hierarchical Regression Equations
Examining Association
Between Family Functioning and
Changes in Conduct Disorder:
Descriptions of the Changes in $R^2$




*p<.001

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